

Fig. 1

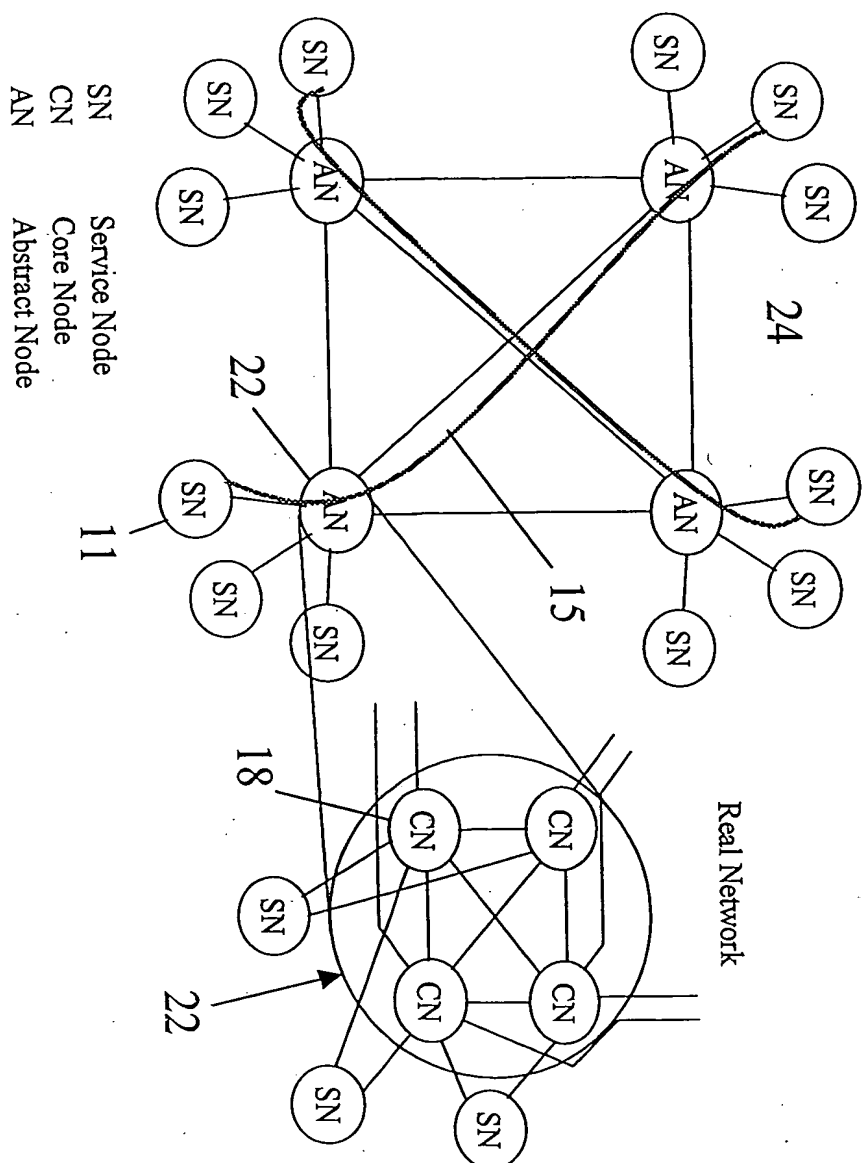


Fig. 2

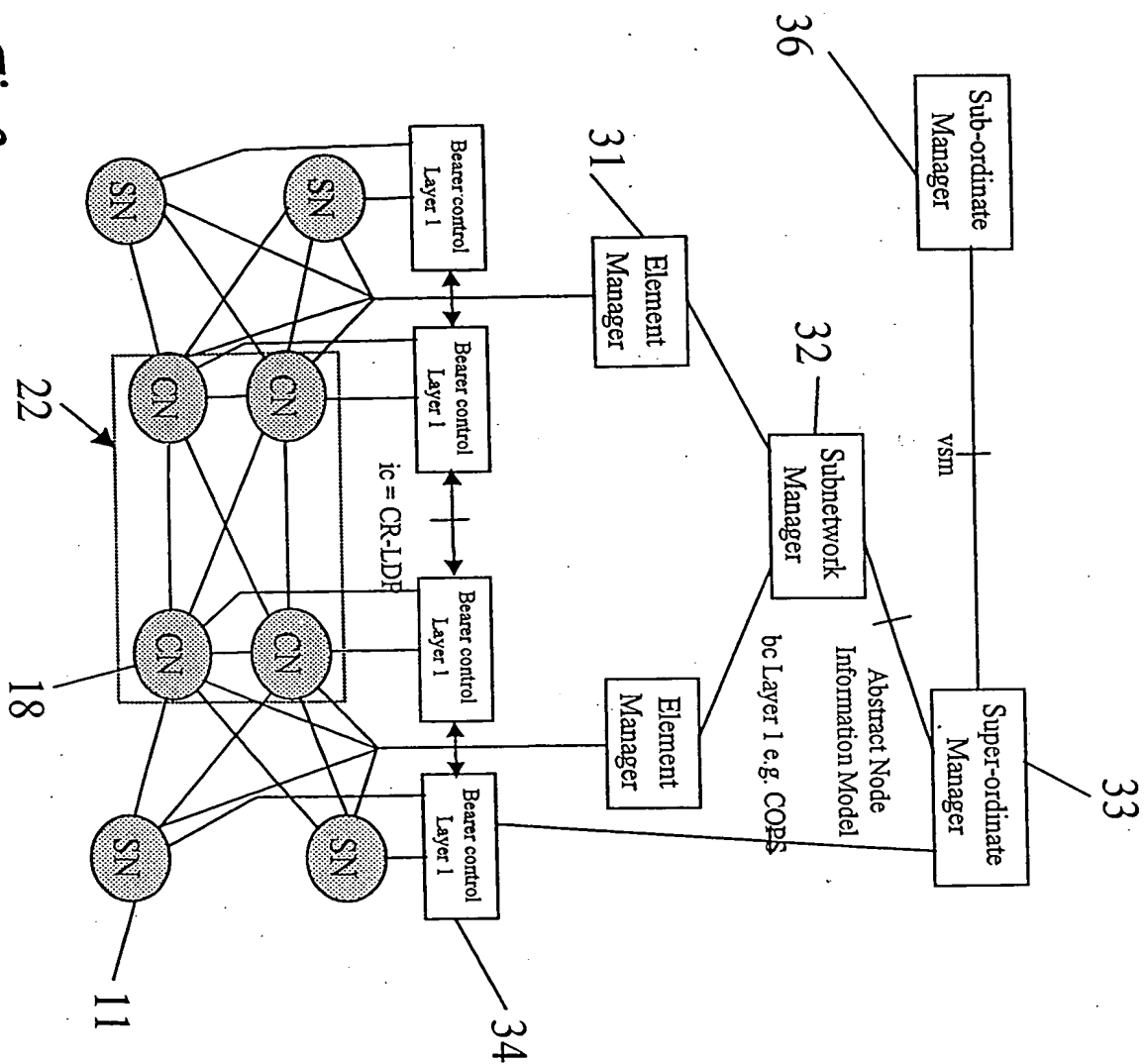


Fig. 3

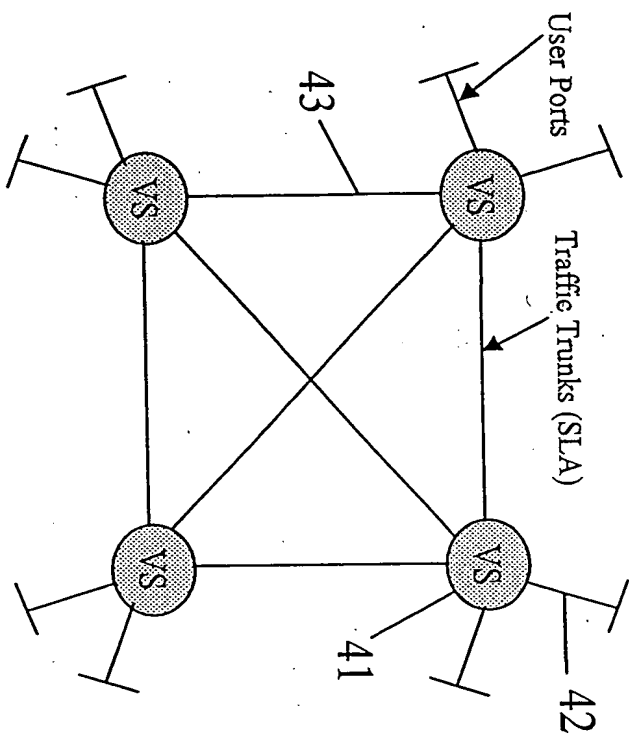
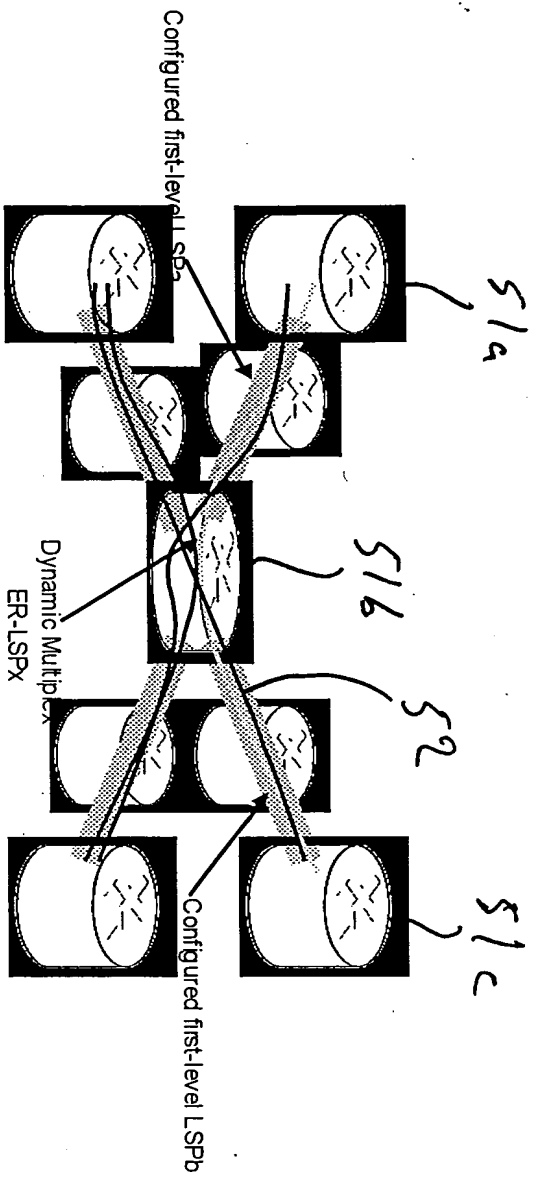


Fig. 4



Dynamic Multiplex ER-LSP may be used to switch a new session if and only if the capacity contracts of LSPa and LSPb are not exceeded by this new request.

Figure 5 Dynamic Multiplex ER-LSP

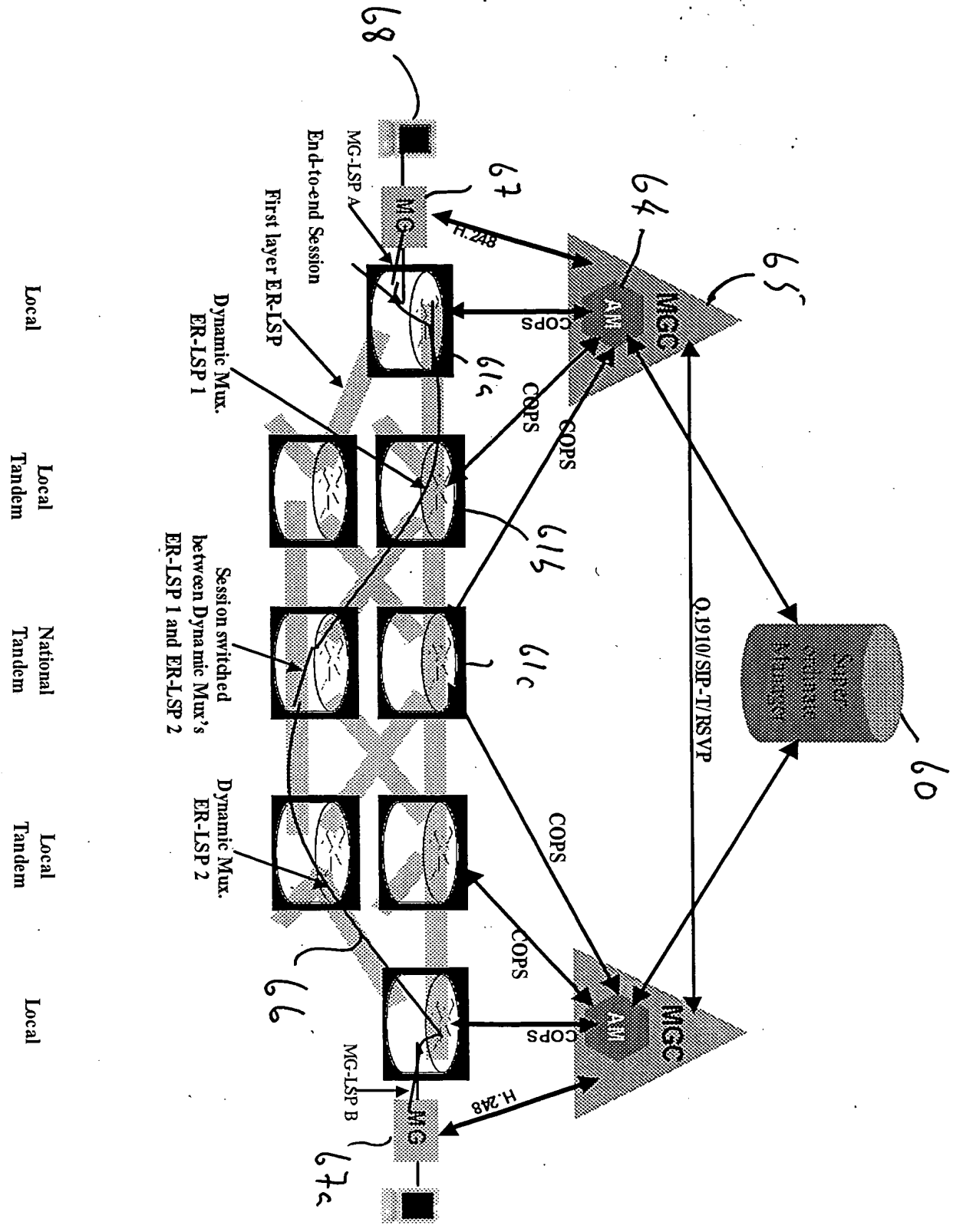


Figure 6 Five-stage VPN with Four-layer Label Control

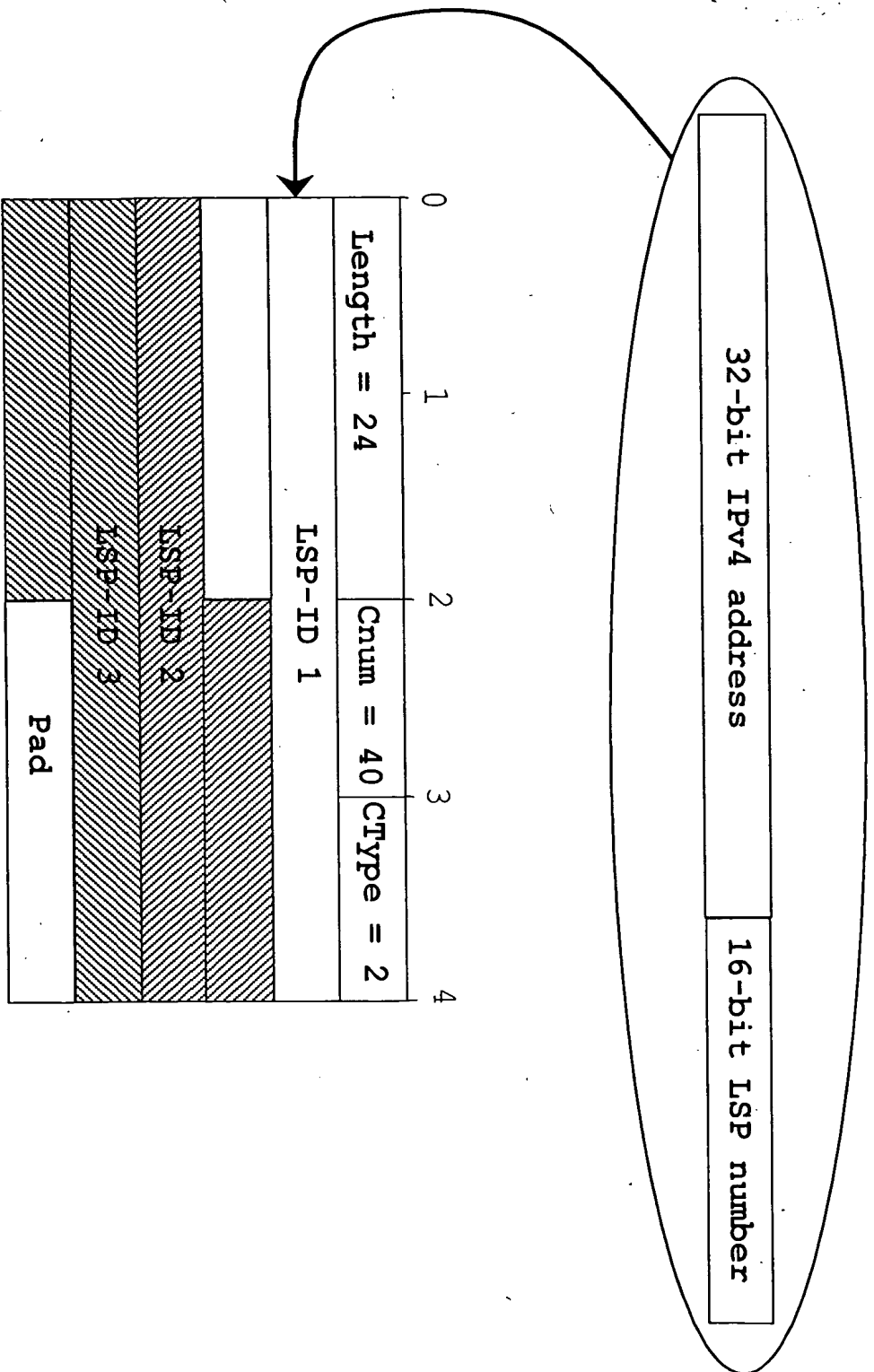


Figure 10 COPS Specific Object for LSP-IDs

Figure 7

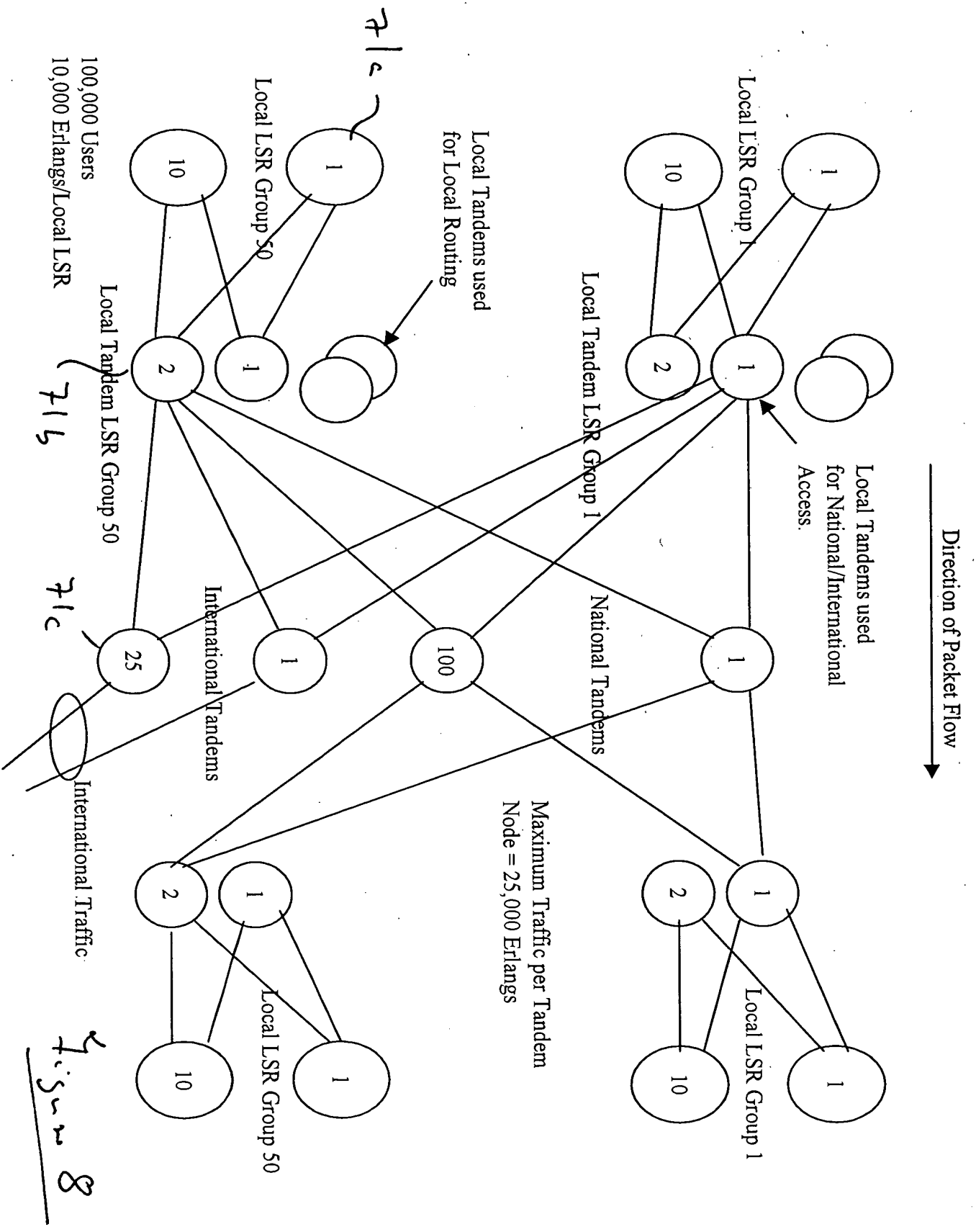
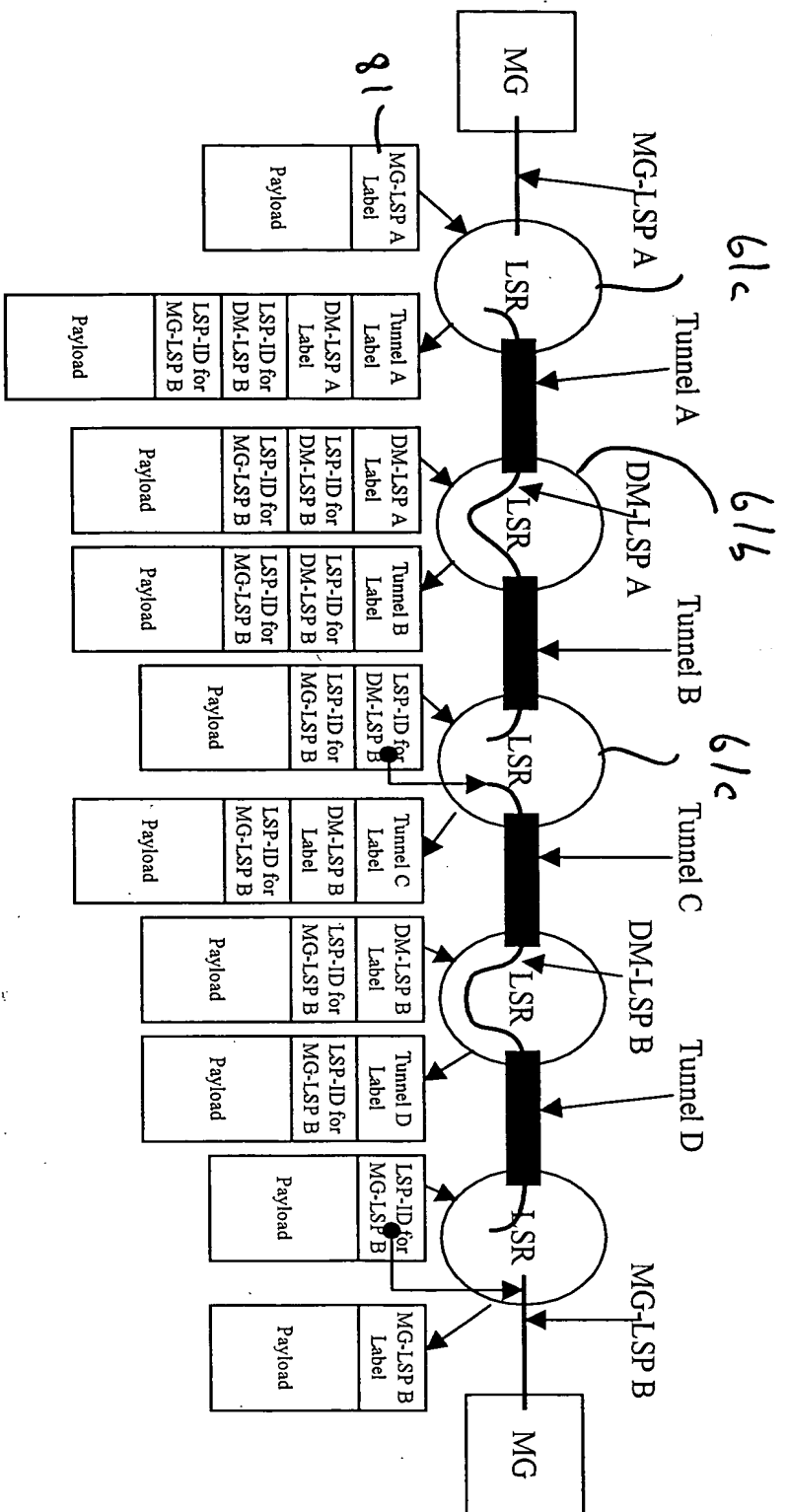


Figure 7 MPLS Network for Session Switching for Fifty Million US Users plus Fifty Million International Users

Figure 8





Each Tunnel is assumed to perform penultimate hop popping at the core LSR prior to the VPN LSRs illustrated above

figure 9

Figure 8 Packet Formats on Ingress and Egress for Five-stage MPLS Network

LSP-ID List:

(MG-LSP A, DM-LSP Ax, Ay, Az)

(MG-LSP A, DM-LSP A, DM-LSP B, MG-LSP B)

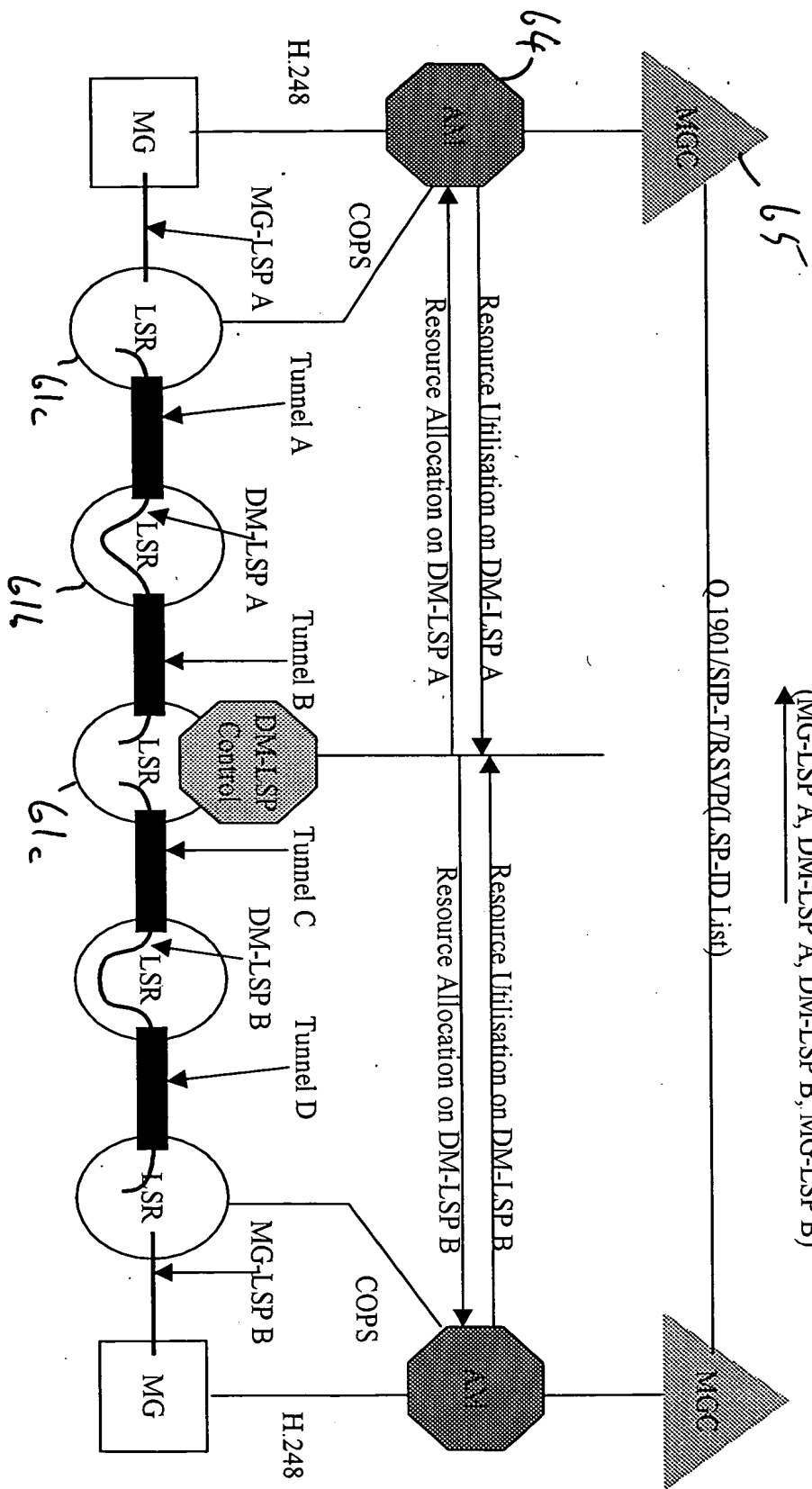


Figure 9 Control Environment for Five-stage MPLS Network